MSD
Metropolitan Sewer District

Louisville and Jefferson County Metropolitan Sewer District
700 West Liberty Street
Louisville Kentucky 40203-1911
502-540-6000
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November 9, 2009

Mr. Femi Akindele
Remedial Project Manager
Kentucky/Tennessee Section
U.S. Environmental Protection Agency
Region IV
61 Forsyth Street
Atlanta, GA 30303

Re: Result of Air Quality Monitoring - FY 10, First Quarter (FY10-1Q), Lees Lane Superfund Site, Jefferson County, Kentucky, Administrative Order on Consent, USEPA Docket No-91-32-C

Dear Mr. Akindele:

In accordance with paragraph 11, under Reporting Requirements, of the subject Consent Order and Attachment 1, Operation and Maintenance Plan For Post-Removal Site Control at the Lee's Lane Landfill Site. Section 4.2, Air Quality Monitoring, attached for your information and files is one photocopy each of the following items, prepared by URS Corporation, 1600 Perimeter Park Drive, Suite 100, Morrisville, North Carolina 27560 and received by MSD on November 5, 2009.

1. URS Corporation letters dated November 2, 2009, 2 pages.
2. Figure 1, Lees' Lane Landfill, Sampling Locations, 1page.
3. Table 1, TO-15 Data Summary for Ambient Air Samples at the Lees' Lane Landfill, Sampling date: September 25, 2009, 1 page.
4. Table 2, On-Site Meteorological Data, Sampling date, September 25, 2009, 1 page.
5. Table 3, TO-15 Data Summary for Gas Monitoring Well Samples at the Lees' Lane Landfill, Sampling date: September 25, 2009, 1 page.
6. Figure 2. Graphic Display for Gas Monitoring Well Samples for Methane.

Please advise if you have any questions concerning the attached information.

Sincerely,

Richard H. Watkins, Sr.
Maintenance Supervisor

RHW/rw
Lees-10-1Qtr

Enc.

cc: Kentucky National Resource Environment Protection Cabinet
Ms. Cheryl Brown Harris, Division of Waste Management
H. J. Schardein, Executive Director
Michael Griffith
Lees Lane File

URS

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November 2, 2009

Mr. Rick Watkins
Louisville Metropolitan Sewer District
3050 Commerce Center Place
Louisville, KY 40211

Dear Rick:

Enclosed is the summary analytical report for the ambient air and gas monitoring well samples collected at the Lee's Lane Landfill site on September 25, 2009 (Quarter 46). Six ambient samples, along with all six (G1, G2, G3, G4, G5R, G5L) well samples and a Field Blank were taken.

A map of the site, labeled with the sample collection locations for your reference, is shown in Figure 1. Table 1 is a tabular summary of the ambient samples with the primary analytes required for submission to EPA. Benzene, methylene chloride, toluene, and xylenes were detected in small quantities in select ambient samples. Vinyl chloride was not detected, and methane concentrations were consistent with historical data.

The sampling locations were chosen based on a combination of prevailing on-site meteorology and accessible sites in the adjacent residential neighborhood per the standard sampling protocol. The meteorological conditions were moderate throughout the sampling day; cool (66-77 ^{O}F), with light variable winds and occasional mist and fog. The information displayed in Table 2 was obtained from the Louisville International Airport (Standiford Field) National Weather Service Station. The ambient air samples were collected in Summa canisters positioned 3-5 feet above ground level, integrated over an approximate 7-hour collection period.

The methane analysis was performed by GC/FID using a separate analytical system from the TO-15 analysis employed at STL in Austin. The TO-15 analytical methodology using Gas Chromatography/Mass Spectrometry (GC/MS) was employed. Samples were handled with standard laboratory chain-of-custody procedures. Sample canisters and flow controllers were cleaned and blanked using method TO-12 for total non-methane hydrocarbons prior to field deployment. All of the samples were successfully collected and analyzed for methane and the TO-15 target analytes. Quality control parameters of precision (repeatability) and spiking of surrogate compounds meet internal URS and project-required specifications.

The reliability of this data set can be characterized as good, based on the repeatability (analytical precision), surrogate spike recoveries, blank levels and the relatively few number of unresolved interfering peaks in the sample chromatograms. The September 25, 2009 field blank canister reported no positive hits other than the surrogate recoveries. The reported results have not been blank corrected in attached tables per our standard project procedure.

URS Corporation
1600 Perimeter Park Drive
Morrisville, North Carolina 27560
Telephone: 919.461.1100
Fax: 919.461.1415

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Table 3 is a tabular summary of the gas well samples with the primary analytes required for submission to EPA. Following field sample collection, Well G-1 was sampled with a GA-90 analyzer to test for the presence of methane in the well. Methane was not detected in Well G-1 or the vicinity of the well above background by the instrumentation.

URS appreciates the opportunity to assist your staff with this project. Please advise me at (919) 461-1242 if you have any questions.

Sincerely,

Robert F. Jongleux
Project Manager

Enclosure

cc: Chris Davis, URS/LOU
Project File/Task 46

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TABLE 1

TO-15 DATA SUMMARY FOR AMBIENT AIR SAMPLES AT THE LEE'S LANE LANDFILL SAMPLING DATE: 25 SEPTEMBER 2009

	Ambient Air Samples					
Sample ID	A1	A2	U1	R1	R2	R3
Canister ID	RA2034	5412	RA2031	RA2030	RA2116	RA2035
Dilution Factor	6.811	5.726	4.986	4.381	6.482	5.572
Location	ONSITE	ONSITE DUP	LG&E	4423 WILSHIRE	PUTNAM LANE	PUTNAM END
Veriflow ID	A181861	A16853	A218997	A134120	A218796	A181856
Compound (ppbV)						
Benzene	0.146	0.159	0.138	0.192	0.152	0.153
Methylene chloride	0.057	0.052	0.049	0.053	0.053	0.040
Toluene	0.653	0.742	0.547	1.11	0.842	0.754
Vinyl chloride	ND	ND	ND	ND	ND	ND
Xylene (Total)	0.121	0.162	0.108	0.182	0.154	0.125
Methane (ppmV)	4.65	4.29	4.65	3.54	4.03	3.74

ND = Non Detect

TABLE 2

LOCAL METEOROLOGICAL DATA AMBIENT AIR SAMPLES SAMPLING DATE: 25 SEPTEMBER 2009

Time	Barometric Pressure (in Hg)	Temperature (°F)	Dewpoint (°F)	Wind Direction (from)	Wind Speed (mph)	Observation
7:56 AM	30.07R	68	66	E	4.6	LT RAIN
8:56 AM	30.08R	68	66	CALM	CALM	OVERCAST
9:56 AM	30.09R	69	67	CALM	CALM	OVERCAST
10:56 AM	30.08F	71	68	ESE	6.9	OVERCAST
11:56 AM	30.09R	72	69	VARIABLE	3.5	OVERCAST
12:56 PM	30.08F	73	69	SSE	3.5	OVERCAST
1:56 PM	30.07F	75	70	CALM	CALM	HAZE
2:56 PM	30.06F	76	71	W	3.5	HAZE
3:56 PM	30.05F	77	70	CALM	CALM	HAZE
4:56 PM	30.04F	76	70	NNE	5.8	LT RAIN
5:56 PM	30.06R	75	70	N	4.6	HAZE

Source: National Weather Service, Louisville, Ky.

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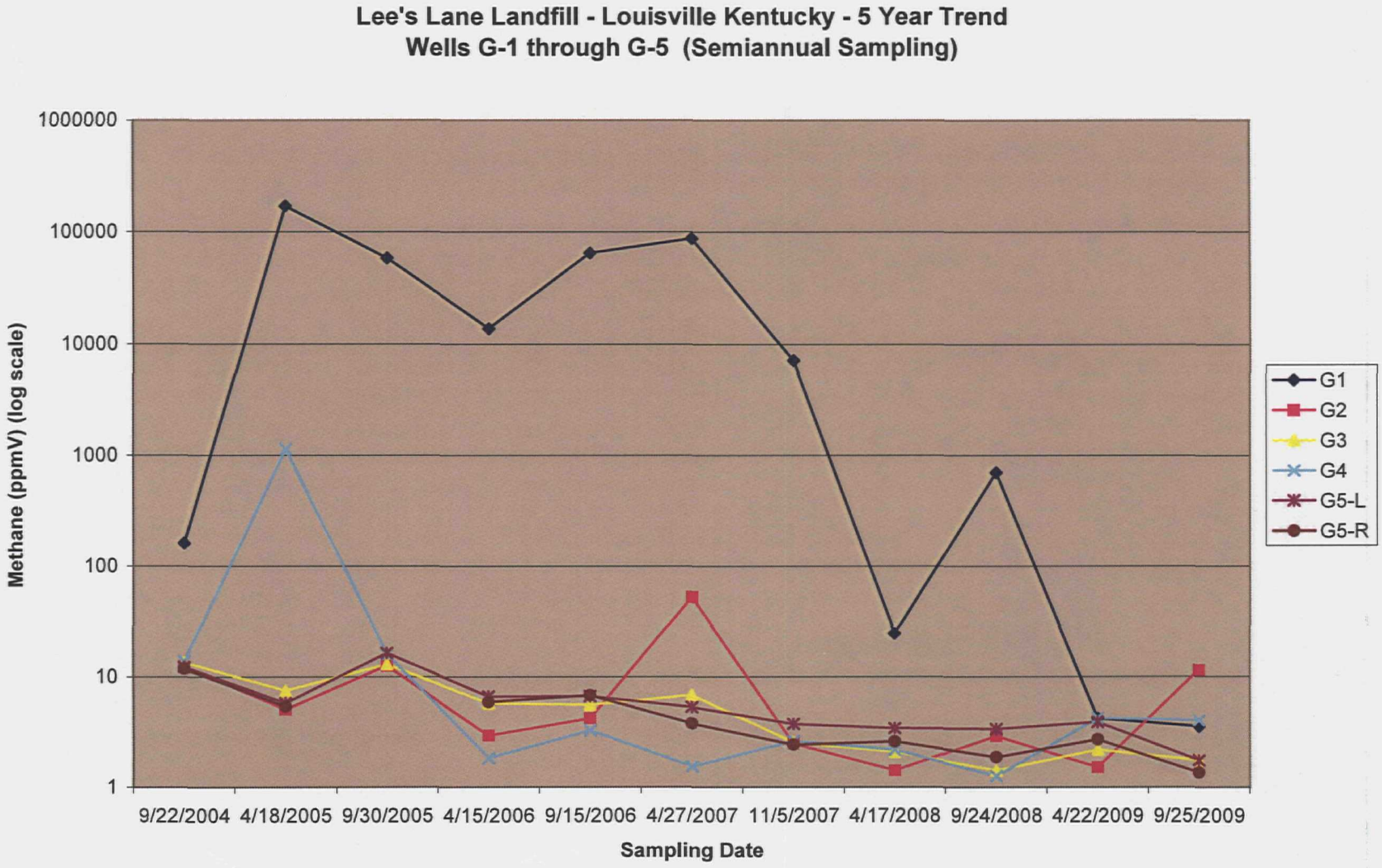
TABLE 3

TO-15 DATA SUMMARY FOR GAS MONITORING
SAMPLING DATE: 25 SEPTEMBER 2009

	Well Samples						BLANK #1
	G1	G2	G3	G4	G5-L	G5-R	
Canister ID	RA2029	RA2036	RA2028	RA2032	RA2115	RA2027	RA0898
Dilution Factor	4.3214	4.4734	4.349	4.351	4.2486	4.2486	2
Orifice	RA2035	RA2036	RA2028	RA2116	RA0898	RA2027	NA
Sampling Date	9/25/2009	9/25/2009	9/25/2009	9/25/2009	9/25/2009	9/25/2009	9/25/2009
Compound (ppbV)							
Benzene	0.089	0.080	ND	0.071	ND	ND	ND
Methylene chloride	0.028	ND	ND	ND	ND	ND	ND
Toluene	0.418	0.086	0.052	0.514	0.074	0.012	0.118
Vinyl chloride	ND	ND	ND	ND	ND	0.161	ND
Xylene (Total)	0.0605	ND	ND	ND	ND	ND	ND
Methane (ppmV)	3.53	11.4	1.75	4.02	1.74	1.35	0.50

ND = Non-Detect


Lee's Lane Landfill - Louisville Kentucky - 5 Year Trend
Wells G-1 through G-5 (Semiannual Sampling)
Methane (ppmV) (log scale)
1000000
100000
10000
1000
100
10
1
9/22/2004
4/18/2005
9/30/2005
4/15/2006
9/15/2006
4/27/2007
11/5/2007
4/17/2008
9/24/2008
4/22/2009
9/25/2009
Sampling Date
G1
G2
G3
G4
G5-L
G5-R